Dynalink

ADSL Router/Modem

PPPoA/PPPoE Quick Setup Guide

RTA230

Important

This Guide is intended to get you started quickly. We have made the factory default setting of this router suitable for Australia. All you need is to follow through the steps we describe here.

This Guide should be read in conjunction with the *RTA23x Series ADSL Router User's Manual*. It is provided as a PDF file on this CD. To view or print the *User's Manual*, go to the previous menu **ADSL Router (RTA230)** and click the **View User Manual** button.

Important safety notes can be found on page III of the *User's Manual*. Advanced users or users who have other setup preferences should also read the *User's Manual*.

If you choose to connect via the Ethernet port, no driver is required. If you choose to connect via the USB port, you will need to load a driver. A driver is only available for Windows 98, ME, 2000 and XP systems. The drivers are found on this CD. To install a driver into Windows, go to the previous menu **ADSL Router (RTA230)** and click the **Modem drivers** button.

1 Default Configuration

This Router is shipped with the following factory default settings.

Router IP address	192.168.1.1
Subnet mask	255.255.255.0
VPI	8
VCI	35
Connect mode	PPPoA VC-MUX
NAT	enabled
DSL line mode	auto select G.DMT / T1.413
WAN IP	dynamic
DHCP	enabled
DNS relay	on
UPnP IGD	enabled
Firewall incoming	on
Firewall outgoing	off

Router configuration & management:

User name	admin
Password	admin
Telnet password	admin

If your ISP specifies that your ADSL service is PPPoE, connect mode must be changed to PPPoE LLC/SNAP. Instructions to do this follow in Section 6. Check with your ISP if you are unsure of the type of service you have subscribed to. Advanced users who have other setup preferences should first read the User's Manual.

2 Before you start

Make sure your computer has these installed:

- Ethernet or USB port
- TCP/IP protocol enabled
- A web browser, Internet Explorer 5.0/Netscape 6 or better.

Obtain your Internet account information from your ISP:

- Login user name and password
- Public IP address (only if you subscribe for static IP)
- DNS server IP (only if specified by ISP).

Choose from your connection options:

1. **Ethernet (for standalone computer, Operating System independent)**
   Connect the LAN port of the router directly to the Ethernet port of your computer. One Ethernet cable is provided.

2. **Ethernet (for multiple computers, Operating System independent)**
   This is for sharing Internet access. You will need to purchase a network hub and extra Ethernet cables. Using the provided Ethernet cable, connect the LAN port of the router to any of the ports available on the hub. Next, connect each of the computers to the network hub.
3. **USB (for standalone Windows 98/ME/2000/XP computers only)**
   Connect via Ethernet is the preferred option. If your computer does not have an Ethernet port you may choose this option. You must then install a driver to operate the router. The drivers are found on this CD. To install a driver into Windows, go to the previous menu and click the **Modem drivers** button.

3 Connect the Router

1. Connect the DSL port of the router directly into your ADSL jackpoint (telephone wall socket) with the provided line cord. Do not connect through a filter, unless the filter has a designated MODEM port for this purpose.
2. Connect the LAN port of the router and the Ethernet port of your computer using the Ethernet cable provided. If you choose to connect via the USB port, there is no need to use the Ethernet cable. **Make no USB connection now.** During driver installation, you will be advised to connect the USB port of the router to your computer.
3. Connect the provided AC/AC power adaptor to the PWR jack of the router. Plug the adaptor into a mains power outlet. Switch on the router. The DIAG light will remain on for a short time indicating self-check in progress. Wait until the DIAG light has turned off before proceeding to the next section. In normal operation these three lights shall be on: PWR, LAN (or USB) and DSL. Section 9 of this Guide explains how these indicator lights work.

4 Get your computer ready for networking

The description below assumes you are connecting the router via Ethernet. If you are connecting the router via USB, refer to ***Chapter 2*** *- USB Driver Installation on page 4 of the User's Manual on this CD.*

You have two options. Following option 1 is the simplest. This is the Windows default network setting.

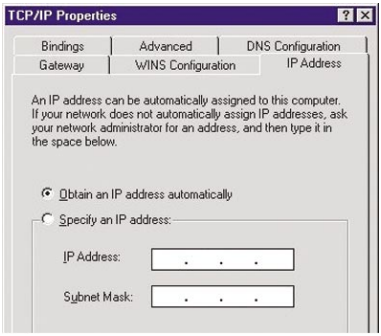
OPTION 1 CONFIGURE YOUR COMPUTER TO OBTAIN AN IP ADDRESS FROM DHCP

If your computer is already configured to obtain an IP address automatically (from a DHCP server), do nothing and proceed to **Section 5 – Getting On-Line**. By default the router is a DHCP server.

Windows 95/98/ME:

From **Control Panel,** double click **Network**. Scroll down and highlight **TCP/IP** -> (your network card). Click **Properties**.

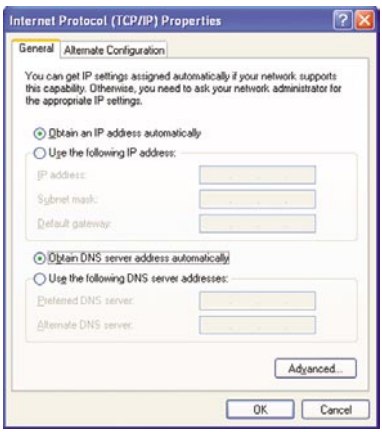
1. Select the **IP Address** tab. Select "Obtain an IP address automatically"
2. Click **OK** & then **OK** to finish. You may be prompted for the Windows CD and then be asked to restart. Answer **Yes** to restart the computer.


TCP/IP Properties
Bindings
Advanced
DNS Configuration
Gateway
WINS Configuration
IP Address
An IP address can be automatically assigned to this computer. If your network does not automatically assign IP addresses, ask your network administrator for an address, and then type it in the space below.
Obtain an IP address automatically
Specify an IP address:
IP Address:
Subnet Mask:

For Windows 2000/XP:

1. From Control Panel double click **Network Connections**. Open Local Area Connections and click **Properties**. Double click **Internet Protocol (TCP/IP)**. Select **Obtain an IP address automatically** and select **Obtain DNS server address automatically.**
2. Click **OK** to finish.

You have now finished configuring your computer.

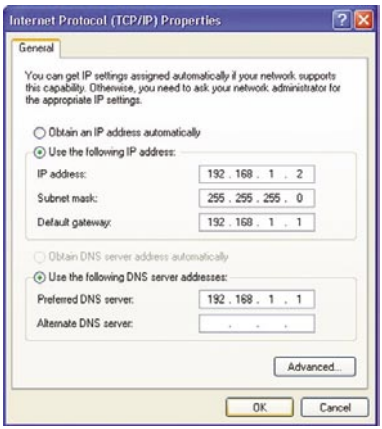

Internet Protocol (TCP/IP) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

Now proceed to the **Section 5 – Getting On-Line**.

OPTION 2 MANUALLY ASSIGN AN IP ADDRESS TO YOUR COMPUTER

The router's default address is 192.168.1.1. If you prefer to assign an IP address manually, use **192.168.1.**x (x is a number between 2 and 254).

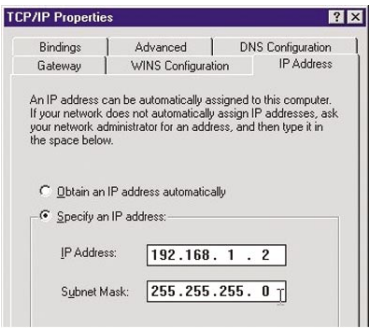
Windows XP/2000:

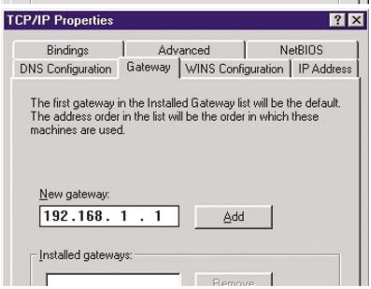

Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address: 192 . 168 . 1 . 2
Subnet mask: 255 . 255 . 255 . 0
Default gateway: 192 . 168 . 1 . 1
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server: 192 . 168 . 1 . 1
Alternate DNS server:
Advanced...
OK
Cancel

1. Go to **Control Panel – Network Connections**. Open **Local Area Connections** and click **Properties**. Double click **Internet Protocol (TCP/IP)**. Select **Use the following IP address.**
2. Enter **192.168.1**.x (x is a number you pick between **2** and **254**). This is the **IP address** you assign to the computer. **Subnet Mask** is **255.255.255.0.**
3. Enter the router's IP **192.168.1.1** as **Default gateway,** and as **Preferred DNS server.** If your ISP specifies DNS server addresses, enter the specified addresses according to the ISP's instructions.
4. Click **OK** to finish.

You have now finished with configuring your computer.
Now proceed to **Section 5 – Getting On-Line**.

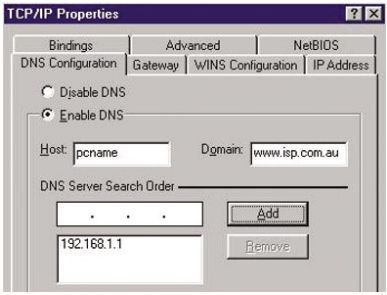
Windows 98/ME:


TCP/IP Properties
Bindings
Advanced
DNS Configuration
Gateway
WINS Configuration
IP Address
An IP address can be automatically assigned to this computer. If your network does not automatically assign IP addresses, ask your network administrator for an address, and then type it in the space below.
Obtain an IP address automatically
Specify an IP address:
IP Address: 192.168. 1 . 2
Subnet Mask: 255.255.255. 0



1. From Control Panel, double click **Network**. Scroll down to highlight **TCP/IP > (your network card)**. Click **Properties.**
2. Select the IP Address tab. Specify **192.168.1.**x (x is a number you pick between **2** and **254**). This is the IP address you assign to the computer. **Subnet Mask** is **255.255.255.0.**
3. Select **Gateway** tab. Enter the router's IP address **192.168.1.1**. Click **Add.**

4. Select **DNS Configuration tab**. Select **Enable DNS.** If your ISP specifies DNS server addresses, please enter your **ISP DNS server address** then click **Add** otherwise enter DNS IP address **192.168.1.1.**
5. Click **OK** & then **OK** to finish. The system may ask to read the Windows CD, and then ask to restart the computer.



You have now finished with configuring your computer.
Now proceed to **Section 5 – Getting On-line.**

5 *Getting On-line*

It takes only 2 easy steps.

STEP 1 GO TO THE 'CONNECT TO INTERNET' PAGE

Start your web browser. Enter the default address **http://192.168.1.1.** Type **admin** for both User name and Password.

*See Q1 in **Section 10 - Troubleshooting** if you cannot get this screen.*

Next you will be in the **Quick Start** > **Connect to Internet** page.

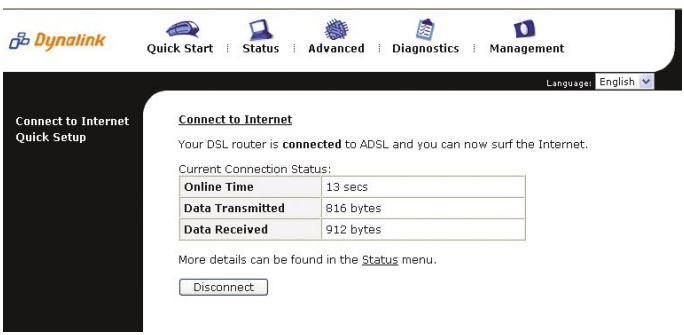
If your ISP specifies that your ADSL service is PPPoE, you must now follow Section 6 to change the router's connect mode to PPPoE. Check with your ISP if you are unsure of the type of service you have subscribed to.

STEP 2 ENTER INTERNET ACCOUNT DETAILS

Enter your Internet account User Name & Password in the exact format as specified by the ISP. Make sure the page displays **"Your DSL router is ready to connect"** before clicking **Connect.**

See Q2 in Section 10 – Troubleshooting, if after several minutes the message "Your DSL router is not ready to connect" still shows.

Once connected the screen changes to display the on-line time. Click **Disconnect** only if you wish to disconnect manually.



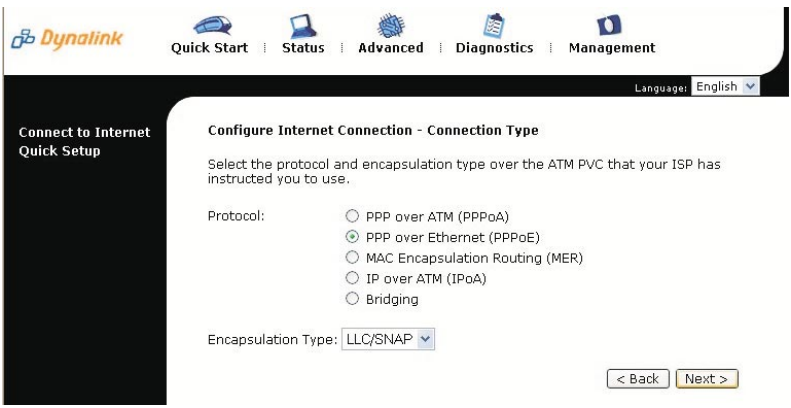
Your Internet account user name & password will be saved automatically.

6 Configuration for PPPoE service

Follow this procedure ONLY if your ISP specifies the service as PPPoE. Caution - do not set your router to PPPoE mode if your ADSL service is PPPoA. It will not connect. Reset to factory default will restore router to PPPoA mode.

From the **Quick Start** menu click on **Quick Setup** to configure for PPPoE.

1. Untick the **Auto Scan Internet Connection** box. VPI and VCI shall be set to 8 and 35 respectively. Click **Next** for the next page.
2. Select **PPP over Ethernet (PPPoE)**. Encapsulation shall be **LLC/SNAP** as illustrated below. Go to the next page, change nothing and then **Next.**



3. You can enter your Internet account User Name & Password now. If you leave the space as blank, you will be asked to do it later. Go **Next.**
4. Do not change the network configuration unless you are an advanced user having your own preferences. Go **Next.**
5. A summary of the configuration is displayed. Check carefully that the setting is **VPI/VCI = 8/35, Connection Type is PPPoE LLC/SNAP.** Then click **Finish** to confirm the changes. The router will restart itself automatically to activate the new setting.

6. Now follow *Step 2 of Section 5 – Getting On-line*. The screen will show the changes made: pppoe_8_35 has replaced the default pppoa_8_35.

7 Some advanced functions of your router

Firewall & traffic restrictions

By default a preset firewall is invoked to block incoming requests including *Ping* from the Internet to your private network. In the reverse direction requests sent from your network can freely pass through to the Internet.

If you have local servers on your network and want the servers accessible to Internet users, set up Virtual Servers. Refer to *Chapter 4 – NAT Virtual Servers* on page 43 of the *User's Manual*.

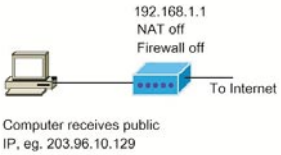
If you run applications that require unrestricted 2-way traffic between a computer on your network and the Internet, set up the computer as DMZ Host. Refer to *Chapter 4 – NAT DMZ Host on page 45 of the User's Manual*. Caution - the specified computer will no longer be protected by the firewall.

You can prevent or restrict access to the Internet from specified computers on your network by defining IP Filters. Refer to *Chapter 4 – Filtering by IP address* on page 47 of the *User's Manual*.

IP Extension Mode (bridging) operation

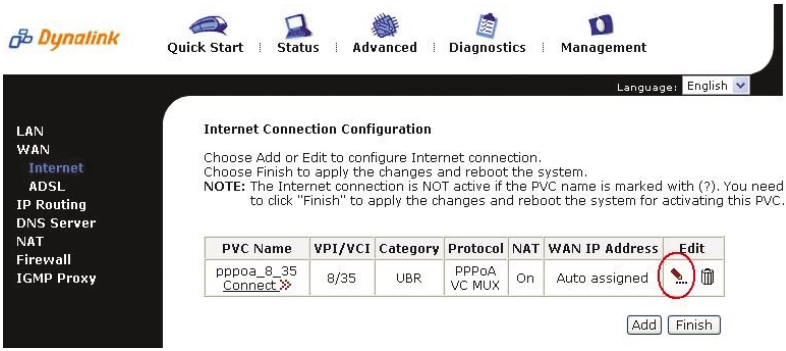
In IP Extension Mode the ADSL router is reduced to resemble an ADSL modem. Firewall protection and sharing are not available. The router acts as a bridge between WAN & LAN. A computer or network device behind it receives a public

IP directly from the ISP. This arrangement is suitable for certain advanced applications that require the device behind to receive a public WAN IP.



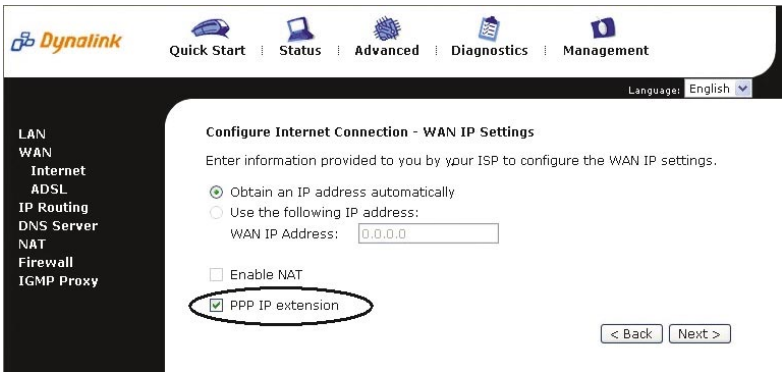
***CAUTION:** This mode of operation assumes firewall security will be provided by another device on your LAN.*

To set up IP extension, go to the **Advanced** menu. Select **WAN > Internet**. Click on the "modify icon" under **Edit:**



The next screen displays VPI and VCI as 8 and 35. Do not change these numbers. Go **Next**. Select **PPPoA VC MUX or PPPoE LLC/SNAP**. If your ISP did not specify PPPoE you can assume it is PPPoA. Go **Next.**

On the next screen untick **Enable NAT**, and tick **PPP IP extension** as illustrated. Go **Next.**



Enter your Internet account user name and password. Go **Next.**

The new configuration is displayed. Click **Apply** to confirm the changes. The router will restart itself to activate the new setting.

You will notice all NAT or firewall settings disappear from the **Advanced** menu hereafter. Now follow Step 2 of *Section 5 – Getting On-line*.

Please refer to the *User's Manual* for other advanced functions. Always restart the router to activate any changes to configuration.

8 Tips for security

This router is shipped "secure" by default. In order to take full benefit from the security features of this router:

Do:

- Change your router's administrative user name & password.
- Back up your router's configuration. This function can be found in the router's **Management** > **Backup Config** menu.
- Disable UPnP if you don't need this function.
- Read about the more advanced functions of this routers. They can be found in *Chapter 4* of the *User's Manual* on this CD.

Don't:

- Enable remote access to the router, aunless you are confident in handling the security implications.
- Enable IP extension (bridging) without firewall protection. If the router operating in this mode is connected to a computer, to the minimum have a "personal firewall" (software) to protect the computer.
- Send your router away for repair or replacement without resetting to factory default or wiping out your Internet account login details. Use the Backup Configuration option to store your router's setting elsewhere. This function can be found in the router's **Management** > **Backup Config** menu. When a replacement unit is received, restore the original setting from the backup file.

9 *Indicator lights*

There are 5 indicators on the front panel. Every time the router is powered on or reset, the DIAG light will come on indicating self-test is in progress.

Indicator	Status	Description
PWR	Off Solid	Power off. Power on.
DIAG	Off Flashing Solid	Power off, or initial self-test OK. Firmware uploading or updating Initial self-test failed. The unit is faulty.
LAN	Off Flashing Solid	Power off, or no Ethernet link is present. Data is going through the Ethernet port. The Ethernet link is ready.
USB	Off Flashing Solid	Off - USB link not present. Blinking - Data is going through the USB port. The USB link is ready.
DSL	Off Flashing Solid	Power off, or ADSL line training is in progress. Data are going through the ADSL link. ADSL link is ready.

10 Troubleshooting

Q1. Cannot open the Router control panel from my browser.

1. Check that the router's LAN (or USB) light is on. If not, check your Ethernet (or USB) cable.
2. Perform a **PING test**. Go to **Start–Programs–MS DOS/Command Prompt** (In Windows XP or 2000 you may click **Start-Run**. Enter **cmd** then **OK**). Type ping **192.168.1.1** then press **Enter**. The response should be:

   Pinging 192.168.1.1 with 32 bytes of data:
   Reply from 192.168.1.1: bytes=32 time=4ms TTL=30
   ....

   If you see a similar response, the router is communicating with your computer correctly and the problem lies elsewhere. If the result is **Request timed out** or similar failures, there may be a networking problem. Check that the LAN or USB cable is firmly plugged in.
3. Disable any personal firewall or virus checker temporarily. If you are using Internet Explorer, go to **Tools–Internet options-Security**. Reset security level of all 4 icons to **default**. You can revert to your customised settings after configuring the router.
4. If previously the computer had a dialup modem, check browser setting. For example in Internet Explorer, go to **Tools–Internet options–Connections**, and select **Never dial a connection**. Also check **LAN Settings** that the option **Use a Proxy Server** is not selected.
5. If the router is connected to a network hub, try connecting the router directly to the computer in a standalone setup to eliminate any possible problem associated with the hub.
6. The router's private IP address is 192.168.1.1. To access the browser control panel your computer must be on the same subnet as the router. See also Q3.

Q2. Cannot connect to Internet or cannot browse

1. Check router's DSL light is on. Normally it takes less than one minute to establish a link with the telephone exchange. The link will establish as long as there is signal. If the DSL light does not come on the router is not seeing any signal. Check that:

   - ADSL service has been enabled.

- If there is a designated ADSL jackpoint for the service, make sure the router is connected directly into this jackpoint. Other jackpoints cannot be used.
- If there is no designated ADSL jackpoint, any jackpoints may be used. Connect the router directly into a jackpoint, or through the port marked MODEM on a filter.

2. If the router's DSL light is already on, check if router is on line. Go to the *Quick Start* menu as described *in Section 5 – Getting On-line*. If the router reports "Your DSL router is ready to connect", you are not on line. Make sure the user name and password have been entered in the exact format as specified by the ISP.
3. Check the configuration of computer and router. If you still cannot browse, perform a **PING test** as described in Q1-2, using these addresses:

   (A) Ping **www.dynalink.com.au** (or any valid web address)
   (B) Ping 205.178.180.16 (or any valid public IP address)

   If both (A) & (B) reported failed response such as "request time out", and you assigned an IP address to your computer manually. Go to Procedure (2) of *Section 4*. Check that the router's IP (192.168.1.1) is entered as gateway & DNS. If these settings are correct ping the computer's IP (eg. Ping 192.168.1.2). If there is still no reply your network card may be faulty.

   If (A) fails but (B) shows a response, this is probably a DNS problem. Go to Procedure (2) of *Section 4*. Enter the router's IP (192.168.1.1) as DNS.

   If both (A) & (B) show a response, your router is actually on line. The problem may be with your browser setting. Try returning any custom settings of the browser to default. If you have a personal firewall, disable it to see if it makes any difference. Also you may try shutting down the computer and restarting.

Q3. Need to install router on a network that uses a different subnet

If the existing network already has a DHCP server, disconnect one computer from the network. Connect the computer to the router. The host computer will be assigned 192.168.1.2. You can change the router's IP so that it is consistent with the network. Disable DHCP on the router.

Q4. Browsing is fine but I cannot run certain applications.

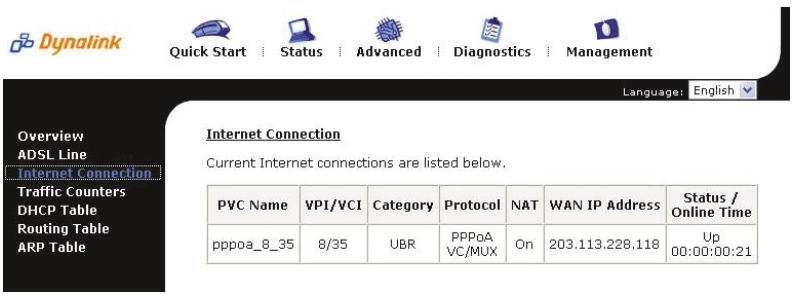
You need to set up virtual servers or DMZ host. See Section 7 on Firewall & traffic restrictions.

Q5. The router's IP and/or administrative password have been modified. But the details have now been forgotten.

You can restore the router to factory default by pushing a pin into the hidden reset button located next to the power on/off button at the back of the router. Push and hold for 5 seconds then release to reset router.

Q6. I need to know the dynamically assigned WAN IP when the router goes on line

Go to Status > Internet Connection, the WAN IP is displayed here.



Q.7 How to get information update

This Quick Guide and User's Manual on CD are the primary source of information about the product. Please check the Dynalink website **http://www.dynalink.com.au** regularly for updates, links, or to download a more current version of this Quick Set-up Guide.

Warranty

Dynalink

Askey Australia Pty Ltd warrants this product against defects in materials and workmanship for a period of 12 months from the original date of purchase. This warranty does not cover any incompatibilities due to the purchaser's computer, hardware, software or any other configuration with which the product interfaces. We will, at our discretion, repair or replace the faulty unit, free of charge, provided it is returned to us with dated proof of purchase from an authorised dealer within the warranty period. Return delivery after repair will be paid for by Askey Australia Pty Ltd within Australia. We reserve the right not to repair or replace goods that:

- Have been mishandled or not installed according to the guidelines as outlined in the instructions.
- Have been subjected to a power surge from other equipment, a lightning strike or other external factors.
- Have been altered or modified.

Help

Dynalink

If you encounter technical difficulties with this product, please first check the documentation that accompanied it. Then please visit our website for up-to-date drivers and troubleshooting at **www.dynalink.com.au/support**

If you are still experiencing technical difficulties with this product, please contact the dealer you purchased the product from. If the problem lies outside your dealer's area of technical expertise, please contact Dynalink Technical Support:

Phone: 1800 653 962 (Mon-Fri, 8.30am-5.00pm EST)
Fax: 1800 063 962
Email: support@dynalink.com.au
Web: www.dynalink.com.au